

1. A distributed network computing environment, comprising:
  - 2 a plurality of clients communicating within a multicast cloud using a stream-specific behavior to implement a groupware application; and
  - 4 one or more network routing modules or router embedded applets operative to support the stream-specific behavior in addition to normal packet-routing.

2. The environment of claim 1, wherein the application is a distributed  
2 simulation or game.

3. The environment of claim 1, wherein the application is a client selectable and  
2 controllable data service associated with the distribution of audio, video, or other digital signal stream.

4. The environment of claim 1, wherein the clients enter, leave, and interact with  
2 the cloud through a lobby manager.

5. The environment of claim 4, wherein the lobby manager is further operative to  
2 validate the application in terms of compatibility and download data to correct for deficiencies.

6. The environment of claim 4, wherein the lobby manager is further operative to  
2 simultaneous support multiple clouds through multicast or replicated unicast protocols.

7. The environment of claim 1, wherein the routing modules implement  
2 application-specific message culling to reduce client-cloud communications.

8. The environment of claim 7, wherein the message culling includes message  
2 omission, rerouting, and other quality-of-service modifications.

9. The environment of claim 7, wherein the application communicates internal  
2 state changes into the cloud through an API.

10. The environment of claim 1, wherein the application is a massive groupware  
2 application involving thousands of world-wide participants.

11. A distributed network computing environment, comprising:  
2 a network-enabled client application;  
at least one lobby manager that facilitates communications between the client  
4 application and a federation; and  
one or more network routing modules or router embedded applets that implement  
6 application-specific message culling to reduce the communications with the federation.

12. The environment of claim 11, wherein the application is a distributed  
2 simulation.

13. The environment of claim 11, wherein the application is a game.

14. The environment of claim 11, wherein the application is a client selectable  
2 and controllable data service.

15. The environment of claim 14, wherein the data service includes audio, video,  
2 or other type of digital signal feed.

16. The environment of claim 11, wherein the routing modules further support a  
2 point-to-multipoint distributed communications model between clients.

17. The environment of claim 11, wherein:  
2 at least some of the client applications run on host platforms; and  
the routing modules further support conventional internet packet routing among the  
4 hosts.

18. The environment of claim 11, wherein the routing modules further support  
2 one or more conventional multicast protocols.

19. The environment of claim 11, wherein the application communicates internal  
2 state changes into the federation through an API.

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20. The environment of claim 11, wherein the message culling includes message  
2 omission, rerouting, and other quality-of-service modifications.

21. The environment of claim 11, wherein the lobby manager is further operative  
2 to validate the client application for compatibility with the federation and download data to  
correct for deficiencies.

22. The environment of claim 11, wherein the lobby manager is further operative  
2 to simultaneous process multiple federations.

23. The environment of claim 22, wherein the federations communicate through  
2 multicast or replicated unicast protocols.